

200100086

THE UNIVERD STANTES OF AMERICA

TO ALL TOWHOM THESE PRESENTS SHALL COME:

Pioneer Hi-Bred International, Inc.

DECTORS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE LIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR ORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT D BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'93B15'

In Jestimonn Mercest, I have hereunto set my hand and caused the seal of the Hunt Inviety Herotection Office to be affixed at the City of Washington, D.C. this fourteenth day of June, in the year of our Lord two thousand one.

Alleste

alank fort

Scling Commissioner Plant Variety Protection Office Sgricultural Marketing Service Sviculture

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)

(management and mineral control of the control of t	sidiomoni on rovoroo,			
1. NAME OF OWNER Pioneer Hi-Bred International, Inc.	•	TEMPORARY DESIGNATION OR EXPERIMENTAL NAME	2. VARIETY NAME 93B15	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and I 7300 N. W. 62 nd Avenue P. O. Box 1004 Johnston, IA 50131		 TELEPHONE (include area code) 515-254-2638 FAX (include area code) 515-253-2288 	PVPO NUMBER FILING DATE	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM ORGANIZATION (corporation, partnership, association, etc.,	ORPORATED, GIVE OF INCORPORATION	9. DATE OF INCORPORATION May 6, 1926	January 25, 26	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE Daria Schmidt, Ph.D. 7300 NW 62 nd Ave. P.O. Box 1004 Johnston, Towa 50131-1004	Jean Brom 7100 NW 6 P. O. Box	nert (copy) 2 nd Ave.	receive all papers)	FILING AND EXAMINATION FEES: \$ 2705 - R DATE JON 25,01 CERTIFICATION FEE: \$ 320.09/100 DATE 6/6/0/
11. TELEPHONE (Include area code) 12. FAX (Inc 515-254-2638 515-253-2		13. E-MAIL schmidtdh@phibred		CROP KIND <i>(Common Name</i>) Dean
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT Serverse) a. X Exhibit A. Origin and Breeding History of the Value of Exhibit B. Statement of Distinctness c. X Exhibit C. Objective Description of Variety d. X Exhibit D. Additional Description of the Variety e. X Exhibit E. Statement of the Basis of the Owner f. Voucher Sample (2,500 viable untreated seeds verification that tissue culture will be depositied as	ariety (Optional) s Ownership or, for tuber propagated varieties,	20. DOES THE OVARIETY BE I	(if "yes", answer items 20 and 21 below) WNER SPECIFY THAT SEED OF THIS LIMITED AS TO NUMBER OF CLASSE	nt Variety Protection Act) NO (If "no," go to item 22) YES NO REGISTERED CERTIFIED
repository) g. X Filing and Examination Fee (\$2,705), made pay States" (Mail to the Plant Variety Protection Office		IF YES, SPEC NUMBER 1, 2, (If additional ex		REGISTERED CERTIFIED
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATE FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRAN OTHER COUNTRIES? YES IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Pick)	SFERRED, OR USED IN THE U. 10 E, DISPOSITION, TRANSFER, OF	S. OR PROPERTY R YES IF YES, GIVE C RUSE REFERENCE	IGHT <i>(PLANT BREEDER'S RIGHT OR</i>	NO N
24. The owners declare that a viable sample of basic seed of the for a tuber propagated variety a tissue culture will be deposited the undersigned owner(s) is(are) the owner of this sexually and is entitled to protection under the provisions of Section 4 Owner(s) is(are) informed that false representation herein call.	ted in 'a public repository and mai reproduced or tuber propagated p 12 of the Plant Variety Protection a	intained for the duration of the plant variety, and believe(s) the Act.	certificate.	
SIGNATURE OF OWNER Dana, A. Schmidt NAME (Please print or type)		SIGNATURE OF C		
Daria H. Schmidt CAPACITY OR TITLE Director, Associative Genetics/Technology Integration S&T-470 (2-99) designed by the Plant Variety Protection Office will	DATE 1/22/01 DATE 1/22/01 Description of the Replaces ST	CAPACITY OR TIT		DATE and information collection burden statement)

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

- 18a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A. Origin and Breeding History of the Variety

Soybean Variety 93B15

Variety 93B15 evolved from a 1993 cross of unknown pedigree. The characteristics of this line could not have come from the recorded parents.

It is an F4-derived variety, which was advanced to the F4 generation by modified single seed descent. The F5 progeny row of 93B15 was grown in the summer, 1996 Plant Row Yield Test. Subsequently, 93B15 has undergone four years of extensive testing and purification and has been observed by the breeder to be uniform and stable for all plant traits from generation to generation, with no evidence of variants. On the basis of tolerance to soybean cyst nematode tolerance, multi-race resistance (Rps1c) to *Phytophthora megasperma* var. *sojae*, tolerance to brown stem rot, and excellent yield potential, variety 93B15 was assigned a commercial number.

The purification block was grown during the summer of 1998 and 102 sublines were bulked for increase. Thirteen acres of 93B15 (breeders seed) were grown in the summer of 1999. Two hundred nineteen acres of parent seedstock (foundation seed equivalent) were grown in the summer of 2000 and 13,402 bushels were harvested.

Exhibit B. Statement of Distinctness

Soybean Variety 93B15

Soybean variety 93B15 is most similar to variety 9306. Both varieties have purple flowers and tawny pubescence. However, 93B15 has yellow seeds with brown hila color, tolerance to Soybean Cyst Nematode races 3 and 14, and is susceptible to race 5 of *Phytophthora megasperma* var. *sojaa whereas* 9306 has yellow seeds with black hila color, is susceptible to Soybean Cyst Nematode races 3 and 14, and is resistant to race 5 of *Phytophthora megasperma* var. *soja*. Lastly, 93B15 and 9305 differ in isozyme marker alleles at loci ACO4, DIA, IDH1, and (Table 1).

Variety 93B15 is also similar to variety 93B01. Both have purple flowers and tawny pubescence. However, 93B15 has yellow seeds with brown hila color, tolerance to Soybean Cyst Nematode races 3 and 14, and is susceptible to race 5 of *Phytophthora megasperma* var. *soja* whereas 93B01 has yellow seeds with black hila color, is susceptible to Soybean Cyst Nematode races 3 and 14, and is resistant to race 5 of *Phytophthora megasperma* var. *soja*. Additionally, 93B15 is susceptible to Roundup branded herbicides whereas 93B01 is resistant. Lastly, 93B15 and 93B01 differ in isozyme marker alleles at loci ACO2, ACO4, DIA, IDH1, and IDH2 (Table 1).

Variety 93B15 is also similar to variety 93B11. Both have tolerance to soybean cyst nematode races 3 and 14. However, 93B15 has purple flowers, tawny pubescence, and yellow seed with brown hila color whereas 93B11 has white flowers, gray pubescence, and yellow seed with buff hila color. Additionally, 93B15 has resistance to race 7 of *Phytophthora megasperma* var. *soja*. Whereas 93B11 is susceptible. Lastly, 93B15 and 93B11 differ in isozyme marker alleles at loci ACO2, ACO4, and PHII (Table 1).

Variety 93B15 is also similar to variety DSR308 from Dairyland Seeds. Both have tawny pubescence, yellow seeds with brown hila color, and resistance to race 7 of *Phytophthora megasperma* var. *soja*. However, 93B15 has purple flower color and DSR308 has white flower color.

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille , large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF APPLICANT(S)		FOR OFFICIAL USE ONLY
Pioneer Hi-bred International		BVPO:NUMBER
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code	9	
7300 N.W. 62 nd Avenue		VARIETY NAME 93B15
P.O. Box 1004		
Johnston, IA 50131-1004		TEMPORARY OR EXPERIMENTAL DESIGNATION
PLEASE READ ALL INSTRUCTIONS CAREFUL below.		cribes the varietal character of this variety in the boxes
Place a zero in the first box (e.g. quantitative		her 99 or less or 9 or less respectively. Data for
plant characters should be based on a minimum of	100 plants. Comparative data should be dete	ermined from varieties entered in the same trial. Royal
Horticultural Society or any recognized color stan-	dard may be used to determine plant colors; d	esignate system used:
Please answer all questions for your variety; lack o	of response may delay progress of your applica	ıtion.
A. MORPHOLOGY		
Seed Shape:		
1 = Spherical (L/W, L/T, and T/W ratios <	2 = Spherical-Flatt 1.2) $(L/W \text{ ratio} > 1.2; L/T \text{ r})$	
3 = Elongate (L/T ratio > 1.2; T/W ratio <	4 = Elongate-Flattened (L/T ratio \geq 1.2; T/W ra	ntio > 1.2)
Seed Coat Color:		•
$1 = Yellow \qquad 2 = Green$	en 3 = Brown 4 =	= Black 5 = Other (Please Specify)
Seed Coat Luster:		
1 = Dull 2 = Shiny		
Seed Size:		
1 6 grams/100 seeds		
Hilum Color:		
3 1 = Buff 2 = Yellow 7 = Other	3 = Brown 4 = Gr er (<i>Please Specify</i>)	ay 5 = Imperfect Black

A. MORPHOLOGY (Continued)

····**200100**0060

Cotyledon Color:

1 = Yellow

2 = Green

Seed Protein Peroxidase Activity:

1 = Low2 = High

Hypocotyl Color:

1 = Green

2 = Green with Bronze ('Evans' or 'Davis') Bands below Cotyledons

('Woodworth' or 'Tracy')

3 = Light Purple below Cotyledons ('Beeson' or 'Pickett 71')

4 = Dark Purple extending to unifoliolate leaves ('Hodgson', 'Coker', or 'Hampton 266A')

Leaflet Shape:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Please Specify)

Flower Color:

1 = White

2 = Purple

3 = White with a Purple Throat

Pod Color:

1 = Tan

2 = Brown

3 = Black

Pubescence Color:

1 = Gray

2 = Brown (Tawny)

3 = Light Tawny

Plant Habit:

1 = Determinate 3

2 = Semi - Determinate

3 = Indeterminate

4 = Intermediate

Maturity Group:

6

1 = 0006 = III

2 = 007 = IV

3 = 0

8 = V

4 = I9 = VI 5 = II10 = VII

11 = VIII

12 = IX

13 = X

14 = XI

15 = XII

Maturity Subgroup:

Please enter a value from 0 - 9

B. DISEASE REACTIONS

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Tolerant

Bacterial

0 Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)

1 Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)

0 Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

В.	DISEASE REAC	CTIONS (Contin	ued)	0 = Not Teste	d	1 = Susceptible	2 = Resistant	3 = Tolerant
Fun	gal						000	10000
	Brown Spot	(Septoria glycino	es Hemmi)				600	11000
	Frogeye Lear	f Spot (<i>Cercospo</i>	ora sojina I	Hara)				
0	race 1		0	race 2		0 race 3	0 ra	ce 4
0	race 5		0	ace 6		0 Other	(Please Specify)	
0	Target Spot ((Corynespora ca	ssiicola (B	erk. & Curt.)	Wei)			·
0	Downey Mild	lew (<i>Peronospor</i>	a trifoliori	ım var. manc	churica ((Naum.) Syd. ex G	äum)	
0	Powdery Mile	dew (<i>Microspha</i>	era diffusa	Cke. & Pk.)				
3	Brown Stem 1	Rot (<i>Phialophor</i>	a gregata (Allington & (Chambe	erlain) W. Gams.)		
0	Stem Canker	(Diaporthe phas	seolorum (Cke. & Ell.) S	acc. vai	c. caulivora Athow	& Caldwell)	
1	Pod and Stem	Blight (<i>Diaport</i>	he phaseo	lorum (Cke. &	EII.) S	acc. var. s <i>ojae</i> (Le	hman) Wehm.)	
0	Purple Seed S	tain (<i>Cercospore</i>	a kikuchii i	(T. Matsu. &	Tomoy	asu) Gardener)		* *
1	Rhizoctonia R	oot Rot (Rhizoc	tonia solai	ıi Kühn)				
Phyto	phthora Root Ro	t (<i>Phytophthora</i>	megasper	ma Drechs. f.	sp. glyc	einea (Kuan & Erw	vîn))	
2	race 1	0 race 8	0	race 15	0	race 22		
0	race 2	0 race 9	0	race 16	0	race 23		
2	race 3	0 race 10	0	race 17	0	race 24		
1	race 4	0 race 11	0	race 18	0	race 25		·
1	race 5	0 race 12	0	race 19	0	race 26		•
0	race 6	0 race 13	0	race 20	0	Other (Please S _l	pecify)	
2	race 7	o race 14	0	race 21				
1	Bud Blight (To	bacco Ringspot	Virus)					
1	Yellow Mosaic	(Bean Yellow N	Iosaic Vir	us)				

Б. 1	DISEASE REACTIONS (Continuea)	u = Not Tested	1 = Susceptible	2 = Resistant	O Tolerant 8
1	Cowpea Mosaic (Cowpea Chlorotic	Virus)		Æ V	
1	Pod Mottle (Bean Pod Mottle Virus)				
1	Seed Mottle (Soybean Mosaic Virus)				
Nema	tode				· .
Soybe	ean Cyst Nematode (Heterodera glycines	Ichinohe)			A Company
0	race 1 0 race 4	0 race)		
0	race 2 0 race 5	3 race 1			
3	race 3 0 race 6	0 Other	· (Please Specify)		
0	Lance Nematode (Hoplolaimus colum	bus Sher)			
0	Southern Root Knot Nematode (Melo	idogyne incognita (l	Kofoid & White) Ch	itwood)	
0	Northern Root Knot Nematode (Melo	idogyne hapla Chit	wood)		
0	Peanut Root Knot Nematode (<i>Meloide</i>	ogyne arenaria (Nea	l) Chitwood)		
0	Reniform Nematode (Rotylenchus reni	iformus Linwood &	Olivera)		
0	Javanese Nematode (Meloidogyne java	unica (Treub) Chitw	vood)		
0	Other Nematode (Please Specify)	·····			
C. PH	YSIOLOGICAL RESPONSES	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolerant
1	Iron Chlorosis on Calcareous Soil				
0	Phosphorus	0 Other	(Please Specify)		
0	Boron				
0	Aluminum				
0	Salt				
0	Drought				

D. IN	SECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant-	3 = Tolerant
0	Mexican Bean Beetle (Epilachna va	rrivestis Mulsant)		""20	010008
0	Potato Leaf Hopper (Empoasca fab	ae (Harris))			
0	Other (Please Specify)				
E. HE	ERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	
2	Metribuzin				
0	Bentazone				
1	Sulfonylurea				
1	Glyphosate				
0	Glufosinate				
0	Pendimethalin				
0	Other (Please Specify)	PTOTAL MARKET			
F. TR	ANSGENIC COMPOSITION				
Has the	development of the subject variety in	cluded the insertion	of genetic material fr	om an organism ot	her than a soybean,
If yes, p	emoval of genetic material from the a lease complete the following informat	apphication variety? tion requests*. Use a	dditional pages if nec	essary.	YES NO
1. Plea	se state the vector's name:				X
2. Plea	se state the vector components:				
3. Plea	se describe the genetic material succ	essfully transferred i	nto the subject variety	y:	
4. Plea	se describe the insertion protocol:				
* A lit the '	erature citation(s) explaining the fou 'Transgenic Composition'' portion o	r information reques f this form.	sts above may be an a	cceptable alternati	ve to completion of
G. BIO	CHEMICAL MARKERS				·
Please d <i>e</i>	escribe any biochemical information	here which you belie	ave will be helpful in f	ingthou dogowikiwa	the cubicat variate

Please describe any biochemical information here, which you believe will be helpful in further describing the subject variety (e.g. Simple Sequence Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if necessary.

H. COMMENTS

Exhibit D. Additional Description of the Variety

Soybean Variety 93B15

In Exhibit C we have identified variety 93B15 as susceptible to bacterial blight, brown spot, pod and stem blight, rhizoctonia root rot, bud blight, yellow mosaic, cowpea mosaic, pod mottle and seed mottle.

This does not mean that variety 93B15 is any worse for these problems than other varieties of similar maturity. Rather, we do not consider 93B15 to be immune to these problems. Therefore, we have chosen to be conservative and have identified the line as "susceptible".

Variety 93B15 is a mid Group III variety. If Group III varieties are divided into tenths, the relative maturity of 93B15 is 3.1.

REPRODUCE LOCALLY. Include form number and edition date on al		FORM APPROVED - OMB No. 0581-005
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made in 1974 (5 U.S.C. 552a) and the Paper	n accordance with the Privacy Act of Reduction Act (PRA) of 1995.
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to det certificate is to be issued (7 U.S.C. 2 confidential until the certificate is issued.	421). The information is held
NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	2. VARIETY NAME
Pioneer Hi-Bred International, Inc.		93B15
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
7300 NW 62 nd Avenue P. O. Box 1004	515-254-2638	515-253-2288
Johnston, IA 50131-1004	7. PVPO NUMBER 0 1 0 0 0	933
8. Does the applicant own all rights to the variety? Mark an "X" in th	e appropriate block.	
If no, please explain.		X YES NO
	•	
Is the applicant (individual or company) a U.S. National or a U.S. If no, give name of country	pased company?	X YES NO
10. Is the applicant the original owner?	If no, please answer one of the following	lowing:
a. If the original rights to variety were owned by individual(s), is (-1/-10
		ai(s)?
YES NO If no, give name of country	У	
 b. If the original rights to variety were owned by a company(ies) 	, is (are) the original owner(s) a U.S. ba	sed company?
YES NO If no, give name of countr	у	
11. Additional explanation on ownership (If needed, use the reverse in	for extra space):	
Please Note:		
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:	
 If the rights to the variety are owned by the original breeder, that per national of a country which affords similar protection to nationals of 	erson must be a U.S. national, national of the U.S. for the same genus and speci	of a UPOV member country, or es.
If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a c genus and species.	red the original breeder(s), the company country which affords similar protection t	must be U.S. based, owned by nationals of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must m	eet one of the above criteria.
The original breeder/owner may be the individual or company who dir Act for definitions.	rected the final breeding. See Section 4	1(a)(2) ot the Plant Variety Protection
According to the Paperwork Reduction Act of 1995, no persons are required to respond to a for this information collection is 0581-0055. The time required to complete this information coinstructions, searching existing data sources, gathering and maintaining the data needed, an	ollection is estimated to average 6 minutes per respo	nse, including the time for reviewing the
The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the b status. (Not all prohibited bases apply to all programs). Persons with disabilities who require contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).	asis of race color pational origin, sex religion, age	disability political beliefs, and marital or familial

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal opportunity employer.

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